Claims:

What I claim as my invention is:

Claims 1-36 (Cancelled)

- 37. (New) A test tip device for measuring an analyte in a sample for minimally invasive diagnostic use comprising: an elongated, light conducting medium between the light emitting/detecting sources and the reagent pad; said light conducting medium being a piece of solid, micro optical fiber with two equal ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said optical fiber; a detection device comprising: (a) a light emitting source; (b) a housing for engaging the other end of said fiber to said light source; (c) a photo detector to receive light reflected off the reagent pad end of said fiber; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.
- 38. (New) The device of claim 37, wherein the test tip is disposable.
- 39. (New) The device of claim 37, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.
- 40. (New) The device of claim 37, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.

- 41. (New) The device of claim 37, wherein said optical fiber is made of glass/glass, or plastic/plastic, or glass/plastic.
- 42. (New) A tubular test tip device for measuring an analyte in a sample comprising: an elongated piece of micro plastic tubing with two ends of equal size; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing; a detection device comprising: (a) a light emitting source; (b) an elongated, fiber optic probe with two ends of equal size to transmit light, (c) a photo detector to receive light transmitted back by said fiber optic probe from reflection off the reagent pad end of said tip; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.
- 43. (New) The device of claim 42, wherein the test tip is disposable.
- 44. (New) The device of claim 42, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.
- 45. (New) The device of claim 42, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.

46. (New) The device of claim 42, wherein said fiber optic probe is made of glass/glass, or plastic/plastic, or glass/plastic.